Reining in energy costs

By KATIE OLIVERI
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ST. GEORGE - After receiving costly winter gas bills, St. George resident Lisa Reid knew she needed to find an alternative energy source for her 3,200-square-foot home.

Her gas bills in the winter would run as high as $260 a month.

"We looked at geothermal, but our house is on a slope so we were unable to do geothermal," she said. "That's when we heard about the rebate from the city (for using solar energy). We decided this is a good thing."

Almost two years ago, Reid had solar panels installed on her roof. The 2-kilowatt solar system cost Reid about $16,000, but she received state and federal tax credits as well as a rebate from the city of St. George.

"At the time, we had the money and we wanted to make the change so the timing could not have been more perfect," she said.

Reid has experienced substantial savings already from the solar technology and the hybrid system for heating and cooling she has at her home, saying both technologies work hand in hand.

"We practically eliminated our gas bill," said Reid, who now pays, on average, about $30 a month for gas in the winter and summer months.

Reid saves about 25 percent a month in electricity costs with the solar technology. Even on a budget, Reid said she has found ways to afford the solar technology, hybrid heating and cooling system and other features like insulation to improve efficiency.

"There's no environmental impact at all (with solar)," she said. "I try to go green as much as I can."

House Bill 201, which passed unanimously in the House and has been introduced in the Senate, could give residents of St. George the chance to take advantage of solar energy through a potential city-built communal solar project instead of purchasing the solar technologies for their home.

Rep. Brad Last, R-Dist. 71, sponsor of HB 201, said on Wednesday that St. George wants to create a communal solar energy project. The city, he said, would build and maintain the project, but "individual citizens can buy into the project and receive credit on their power bill for the amount of power created by the share they own and also be able to get an income tax credit on the front end for their investment."

Individuals could receive 25 percent of their purchase or up to $2,000 as a tax credit, Last said.

"It sure seems like St. George is a great place to try this," he said, adding that the city has the property, the sunshine and the heat.

No other municipal power company in Utah has done a communal solar project, Last said, so St. George would be the leader in the effort.

"If we can generate a little extra power in the summertime when the demand is so high, it's just a great way to enhance the power generation capability in the city in a environmentally responsible way," he said.

RenÃ© Fleming, conservation coordinator for the city of St. George, said right now when people put solar panels on their home or business, they qualify for a state and federal tax credit. To receive the credit, they must affix the solar panels to their home or business. Homeowners typically mount solar panels to roofs.

Right now, if residents have solar capability at their house, they're eligible for a tax credit of up to $2,500 from the state and up to $2,000 from the federal government, Fleming said.

Residents can receive a rebate from the city of $2,000 per kilowatt as well, Fleming said.

The city of St. George is currently studying the feasibility of building a solar generation farm.

"We would like to be able to offer our customers the opportunity to buy a share in the facility," Fleming said.

Residents, she said, would buy into the facility just as if they were buying solar technology for their home. The customer would get a portion of their electricity generated by solar power and the city would credit the resident's electrical use based on the amount of shares they bought in the facility.

Sheldon Johnson was the first St. George resident to go solar, according to Fleming.

"We were the first to originate the use of solar panels with community electricity (in St. George)," Johnson said.

To Johnson, the benefits of having solar panels are two-fold.

"I think it will pay in the long run a lot," he said. "The investment will multiple as time goes on. These (solar panels) are guaranteed for 20 years to produce 85 percent of what they're rated for," adding, "It's a long-range thing."

His home, which is about 3,000 square feet, has a 3 kW solar system. The solar panels are affixed to his roof and were installed in November 2005 when his home was built.

Johnson's son suggested the idea and Johnson decided to adopt solar technology, saying, "Why should we generate electricity, when it's coming right onto our roof all the time?"

"It's free and it's clean," he said. "There aren't very many reasons not to use it."

Johnson added, "We have to push and find innovative ways to do things and do it better."

It cost Johnson about $14,000 to put in the 3 kW system.

"I feel I save about $100 to $150 a month (with solar)," he said, depending on the amount of sunshine.

Solar, he said, "is there for us to use."

"It's more than saving money; it's the right thing to do," he said.

HB 201, Fleming said, is beneficial for several reasons.

It supports the city's effort to increase the percentage of renewable energy resources in its energy portfolio. And when residents take advantage of solar energy, "they're doing something good for the environment," Fleming said.

One of the reasons St. George wants to see the bill passed is it would "make it easier for customers" to participate in projects like this, Fleming said.

"We're hoping that the economics of it make it a feasible project," she said. Renewable energy projects, however, are more expensive than non-renewable.

While cost plays a large role in determining whether a project is feasible or not, other aspects like the environmental benefits and diversification in the city's energy portfolio need to be considered, too, Fleming said.
Because the city is still studying the feasibility of the project, officials aren't sure how much it will cost to build a communal solar farm.

The city has identified and is exploring further a site near the wastewater treatment plant in the Bloomington area for the communal solar farm, she said, adding that the city's water services department is working with energy services regarding site development issues.

Near the wastewater treatment plant there is a substation and the city can tap into its power distribution system easily and "pretty inexpensively," Fleming said. If the city pursues the solar project, anyone on the city of St. George electrical system can participate, she said.

For residents, a share from a communal solar farm would cost approximately $6,000 per kilowatt, Fleming said.

Reid said having a communal solar project in St. George "would be wonderful."

"And the fact we would be the first city in Utah, I think it would catch on like wildfire," she said.

Reid added, "I think we can wean ourselves out of high energy costs."

"I think we're in a habit of this is the way it is," she said. "Now we can step up and make decisions for ourselves" on how to power a home.